Applicants: Reba Goodman, et al.

U.S. Serial No.: 09/769,902 Filed: January 25, 2001

Page 2

## Listing of Claims:

- 1. (Currently Amended) A method for regulating the expression of an exogenous gene introduced into a <u>cell</u> subject by a gene therapy comprising the steps of:
  - (a) introducing providing a gene promoter comprising

    a 900 base pair segment of c-myc promoter

    containing nCTCTn electromagnetic field response

    elements into fused to a HSP70 gene promoter heat

    shock responsive element not having any

    electromagnetic field response elements in vitro;
  - (b) then introducing the gene promoter from step (a) into the exogenous gene so that the promoter controls the expression of the exogenous gene;
  - (c) introducing the exogenous gene into the subject by the gene therapy; and
  - (d) applying an electromagnetic field to the nCTCTn electromagnetic field response elements so as to thereby regulate expression of the exogenous gene introduced into the <u>cell</u> subject by the gene therapy.

## 2-7. (Canceled)

8. (Original) The method as set forth in claim 1, wherein the electromagnetic field is applied at a field strength of about  $8\mu T$  and a frequency of about 60Hz for a time of about 30 minutes.

## 9-12. (Canceled)

13. (Currently Amended) An expression vector comprising[[:]] a

Applicants: Reba Goodman, et al.

U.S. Serial No.: 09/769,902 Filed: January 25, 2001

Page 3

gene promoter comprising a 900 base pair segment of c-myc promoter containing nCTCTn electromagnetic field response elements fused to a HSP70 gene promoter heat shock responsive element not having (a) a nucleic acid whose expression is desired; and

(b) a promoter which permits the expression of the nucleic acid, wherein (i) the promoter does not comprise endogenous electromagnetic response elements, and (ii) the promoter comprises at least one exogenous nCTCTn electromagnetic response element which, when the expression vector is in a cell, regulates the expression of the nucleic acid by application of an electromagnetic field to the cell.

## 14-21. (Canceled)

22. (Currently Amended) A method for regulating the expression of a nucleic acid in a cell comprising applying cell having therein electromagnetic field to а comprising[[:]] a gene promoter vector expression comprising a 900 base pair segment of c-myc promoter containing nCTCTn electromagnetic field response elements fused to a HSP70 gene promoter heat shock responsive element

## (a) the nucleic acid and

(b) a wherein the gene promoter which permits the expression of the nucleic acid, wherein (i) the promoter does not comprise endogenous electromagnetic response elements, and (ii) the promoter comprises at least one exogenous nCTCTn electromagnetic response element which, when the expression vector is in a cell, regulates expression of the nucleic acid by

Applicants: Reba Goodman, et al.

U.S. Serial No.: 09/769,902 Filed: January 25, 2001

Page 4

application of an electromagnetic field to the cell, so as to thereby regulate the expression of the nucleic acid in the cell.

# 23-29. (Canceled)

30. (Previously Presented) The method in claim 22, wherein the electromagnetic field is applied at a field strength of about  $8\mu T$  and a frequency of about 60Hz for a time of about 30 minutes.